

THREE INTERESTING BUTTERFLIES FROM EASTERN MASSACHUSETTS.

AUSTIN HOBART CLARK,

Assistant Curator, Division of Marine Invertebrates, United States National Museum.

The three following records relating to the diurnal lepidoptera of eastern Massachusetts seem worthy of publication. The specimens upon which they are based have been deposited in the United States National Museum.

Junonia cœnia, which is abundant in the Southern States, reaches the northern limit of its range in southern New England; *Euphydryas phaëton* occurs from West Virginia and Missouri northward to northern Canada, reaching as far as Lake of the Woods; it is very local in its distribution, but is usually very common wherever found; *Feniseca tarquinius* ranges from the Mississippi Valley and the Carolinas to Nova Scotia, but is rare and local in eastern Massachusetts.

JUNONIA CÆNIA Hübner.

In my private collection I had two specimens of this species, taken in the summer months of 1895 or 1896, one in Mount Vernon Terrace, Newtonville, the other just north of Mount Vernon Street, near the Newtonville-West Newton border. The former has been lost, but the latter is in the national collection.

I have found this insect commonly at Coffin's Beach, opposite Annisquam, in July, but otherwise it is of very uncertain occurrence in the middle and northern portions of the State.

EUPHYDRYAS PHAËTON (Drury).

Plate 32.

In the latter part of June, 1897, while crossing a boggy meadow in Newtonville, Massachusetts, bounded on the north by Otis Street and on the east by Lowell Avenue, I found this species, previously unknown in that locality, very abundant. Returning immediately with my net, I captured about thirty specimens, among them the one described below. So far as I know no butterflies of this species have ever been taken in this locality since.

I found upon consulting the literature that my aberrant specimen was essentially similar to one described by Strecker¹ as *Melitæa* (i. e.,

¹ Butterflies and Moths of North America, 1878, p. 125.

Euphydras phaeton, ab *a*, *superba*, and also by Hulst,¹ which was taken on Long Island, New York, in 1875. On June 21 I wrote to Mr. Samuel Scudder in regard to my capture, and, under date of June 24, he replied: "The suffused specimen of *phaeton* which you describe is different from those heretofore known, and it would be worth your while to describe it. These aberrations are always interesting, and when they are accumulated in sufficient numbers will serve as a basis for some general statement which can hardly be made now. Your specimen ought finally to rest in some public museum."

Mr. W. F. Fiske² has also described a very similar specimen which he captured in Webster, New Hampshire, on June 12, 1895, in a bog where the species had never previously been observed and where diligent search failed to discover more.

The specimen is a female, and much larger than the average for the species, measuring 64 mm. in expanse. The wings are more rounded than in typical examples, the outer margins of the primaries being convex and not straight or slightly concave in the posterior two-thirds as in the typical form.

The upper surface is not greatly different from that of the typical form, though the yellow spots are much enlarged and more or less confluent.

On the lower surface the yellow spots are enormously enlarged and confluent, forming a broad yellow (of a lighter tint than usual) band of uniform width, extending inward from the red border, from which it is separated by the usual black lunules, to the middle of the wings. This yellow band is crossed by black veins, which are narrowly bordered by black and grayish scales. In the middle and parallel to the borders there is a faint indicated grayish narrow stripe. The usual yellow spots on the inner half of the secondaries are absent, and the red spots are much enlarged; they are separated from the broad yellow band by a narrow but distinct black line.

FENISECA TARQUINIUS (Fabricius).

This insect is rare in eastern Massachusetts and, though I collected constantly in that region for a number of years, I was never able to capture a specimen. Long after my attention had been diverted from entomology into other fields of zoological activity, I noticed, on July 25, 1910, a single specimen flying low over the lawn of the house at the southwest corner of the intersection of Lowell and Highland Avenues, Newtonville. Seizing the hat from the head of a child which was playing near by, I succeeded, with this substitute for a net, in capturing it.

¹ Bulletin Brooklyn Entomological Society, vol. 3, p. 77, pl. 1.

² Entomological News, vol. 7, March 1896, p. 87.